

## REMARKS

Claims 130 to 168 are currently pending in the instant application. Claims 130 to 160 and 168 are withdrawn from consideration.

A. The Rejection under 35 U.S.C. § 112, Second Paragraph Should Be Withdrawn

Claims 161 to 167 are rejected under 35 U.S.C. § 112, second paragraph, allegedly as being incomplete for omitting essential steps. In particular, the Examiner asserts that the conversion of a primary hydroxyl group of neopterin to a thioether in Step (b) “has to be done by first protecting the –OH groups at the 1’ and 2’ positions...and can not be done without prior protection of the remaining hydroxyls.” The Examiner further asserts that “protecting the two hydroxyls is an ‘essential method step’ that has been omitted from the claims.” *See*, Item 1 on pages 2 and 3 of Office Action mailed June 25, 2009. Applicants respectfully disagree.

Applicants would like to direct the Examiner’s attention to Example 5 on page 28 of the instant application as originally filed. Example 5 demonstrates that the primary hydroxyl of neopterin has been converted into a thioether in the presence of two unprotected secondary hydroxyls. Contrary to the Examiner’s assertion, the protection of the two hydroxyls of neopterin is not essential to Step (b) of claim 161 at all. Thus, claims 161 to 167 are complete and there is no step omitted in these claims. Therefore, Applicants respectfully request the withdrawal of the rejection.

B. The Rejection under 35 U.S.C. § 112, First Paragraph Should Be Withdrawn

Claims 161 to 167 are rejected under 35 U.S.C. § 112, first paragraph, allegedly for lack of enablement. In particular, the Examiner asserts that “protecting the two hydroxyls is a ‘critical or essential’ to practicing the claimed invention.” The Examiner further asserts that “none of the claims provide how the selective conversion of the primary hydroxyl is done.” *See*, Item 2 on pages 3 and 4 of Office Action mailed June 25, 2009. Applicants respectfully disagree.

First, the protection of secondary hydroxyl, as discussed above, is neither critical nor essential to Step (b) of claim 161. In fact, the protection of the two hydroxyls is not required

for practicing the claimed invention. *See*, Example 5 on page 28 of the instant application. In addition, the instant application, *e.g.*, Example 5, teaches exactly how this selective conversion of the primary hydroxyl can be achieved. Thus, claims 161 to 167 are fully enabled at least in view of instant Example 5. Therefore, Applicants respectfully request the withdrawal of the rejection.

### SUMMARY

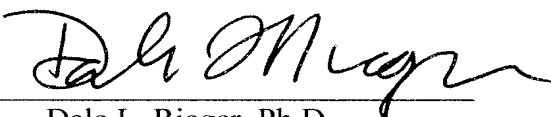
It is believed that the foregoing argument deals with all grounds of objection and rejection, and that the claims remaining in this application are in order for allowance.

Should the Examiner believe that prosecution of this application might be expedited by further discussion of any remaining issue; the Examiner is cordially invited to contact the undersigned representative of Applicants, Dale L. Rieger, Ph.D., by phone at (858) 314-1200 or by email at [drieger@jonesday.com](mailto:drieger@jonesday.com).

A fee of \$130.00 is believed due for the one-month extension of time. This fee will be paid via EFS web. Please charge any other fees deemed due or credit any overpayment to Jones Day Deposit Account No. 50-3013 (referencing CAM No. 120024-999038).

Respectfully submitted,

Dated: October 16, 2009

By:   
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